REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-19 remain active in the application subsequent to entry of this Amendment.

As a preliminary matter, attention is directed to the Information Disclosure Statement filed January 14, 2008 which is after the mailing date of the current Official Action. The relevant fee was paid to have this IDS considered and the examiner is requested to do so when taking up this application again to process this Amendment and response.

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to address the issues raised in items 2-4 of the Official Action. More specifically, appropriate Markush terminology has been employed in claims 7-9 and 11.

Responsive to item 1 and the examiner's comment, claim 2 is being correctly interpreted.

The balance of the Official Action deals with four separate prior art-based rejections in items 6, 15, 18 and 22. Applicant now addresses these rejections in the remarks that follow.

Claims 1, 13 and 18 stand rejected on the basis that US 5,091,244 (in particular Table 3, Figure 3 and column 8, lines 33-36) anticipate these claims. Applicant disagrees for the following reasons.

The present invention relates to an emissivity enhancing coating for a surface having a low emissivity in the infrared light region. The coating comprises at least one electrically conductive transparent film and at least two non-conductive films, whereby the conductive and non-conductive films are applied alternately on top of each other. The non-conductive films have each a thickness of 500 nm to 1500 nm. The coating in accordance with the present invention very attractively **enhances** the emissivity of a surface that is exposed to light having a wavelength in the range of from 5,000-50,000 nm, i.e. infrared radiation (*see* Example and Figure 1). This is important in applications such as solar panels, light reflectors, lamps, metal foils, and articles that can be used in vacuum and. space applications.

US 5,091,244, however, relates to an electronically-conductive visible light-attenuating antireflection coating for use in articles such as sunglasses and solar control glazings. In other words, the teaching of this patent is applied to a completely different light region, namely visible light instead of infrared light. In this respect it is important to note that intrinsic material

properties such as optical constants are wavelength-dependent and show much different behavior in the IR wavelength region. Scaling the coating thickness to shift the design to work at other wavelength regions, which is common practice in thin film design, does not work for these materials in the IR region. Therefore a skilled person using common practice would clearly not arrive at the present invention

Further, from Table 3 of US 5,091,244 it is clear that very thin non-conductive films are used on a substrate of glass, namely films having a respective thickness of 48 nm and 75.2 nm. Such non-conductive films differ essentially in thickness from the non-conductive films that are used in accordance with the present invention. Since glass has as such a high emissivity in the infrared light region, the application of such an antireflective coating would only result in a **decrease** of the emissivity in the infrared light region. In this respect reference is also made to column 1, lines 30-35 where it has been indicated that low emissivity (E) coatings may be used to reduce reflections on solar control glazings. In the infrared light region, such coatings would indeed solely function as reflection enhancers, bringing about a decrease in the emissivity which is exactly the opposite of what applicant wishes to achieve in accordance with the present invention.

In view of the above, it is submitted the present invention as claimed in claim 1-13 and 18 is clearly novel and inventive over US 5,091,244.

The Examiner is further of the opinion that the subject matter of claim 15 is not patentable over US 5,251,202. Applicant disagrees with the Examiner. In accordance with the disclosure of US 5,251,202 an anti-reflection layer is applied on a transparent substrate, e.g. a plastic or glass substrate example (*see* column 2, lines 6 1-66), which as such has a high emissivity in the infrared light region. The anti-reflective layer is composed of a first transparent insulating film layer, a transparent electroconductive film layer, and a second transparent insulating layer. The two transparent insulating layers are very thin. In Table 1 it has been indicated that the thickness of these layers is respectively 116 nm and. 228 nm, which thickness differs from the thickness of the non-conductive films that are defined in applicant's claim 1. Further, this anti-reflective layer is not applied to a metal foil as is claimed in claim 15. Moreover, the anti-reflective coating described in US 5,251,202 will bring about a **decrease** in the emissivity of the transparent substrate in the infrared light region. For the sake of

completeness, it is noted that the teaching of this document also applies to the visible light region, not the infrared light region. In this respect reference is made to column 2, line 27, and the Example. In light of the foregoing, it can only be concluded that the present invention is also clearly novel and inventive over US 5,251,202.

In addition, the Examiner asserts the subject matter of claim 16 "obvious" and hence unpatentable over US 5,091,244 in combination with US 4,226,897. The reasoning that the Examiner applies is that it would be obvious to use the antireflective coating of US 5,091,244 onto a solar cell since it is known that antireflective coatings can be applied to semiconductors in solar ceils, as for example disclosed in US 4,226,897. It should be noted, however, that the use of such antireflective coatings on a solar cell would result in a **decrease** of the emissivity in the infrared light region. It is further observed that the antireflective coating of US 4,226,897 does not contain non-conductive films. Hence, one can only conclude the skilled person would clearly not combine the teachings of US 5,091,244 and US 4,226,897 to arrive at the invention as claimed in claim 17.

The Examiner further argues that the subject matter of claim 17 would be "obvious" and hence unpatentable over the combined teachings of US 5,091,244 and US 5,923,021. In this respect it is firstly noted that the light reflector in US 5,923,021 is the concave collector mirror 401, not the diffuser 402. It is further noted that the diffuser of US 5,923,021 would as such display a high emissivity in the infrared light region. Combining the two references application of the antireflective coatings of US 5,091,244 on the diffuser of US 5,923,021 would therefore only result in a **decrease** of the emissivity of the diffuser in the infrared light region. Lastly, it is observed that also the teaching of US 5,923,021 (as that of US 5,091,244) is applied to the visible light region, not the infrared light region. Thus, again it can only be concluded that the skilled person would clearly not combine the teachings of US 5,091,244 and US 5,923,021 to arrive at the invention as claimed in claim 17.

For the above reasons it is respectfully submitted that claims 1-19 define novel and inventive subject matter. Reconsideration and allowance are solicited. Should the examiner have any questions or require further information, please contact the undersigned.

Respectfully submitted,

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